

**BIOLOGICAL TECHNICAL REPORT
FOR
DAOUD TENTATIVE PARCEL MAP
TPM 20832
ER 04-14-014**


PREPARED FOR:

**David Daoud
904 E. Washington
El Cajon, CA 92020**

PREPARED BY:

**Robin Church
RC Biological Consulting
9621 Campo Road, Suite C
Spring Valley, Ca 91977
(619) 463-1072**

**Final
February 2005**



**Robin Church
County Certified Biologist**

R E C E I V E D
FEB 18 2005
**DEPARTMENT OF PLANNING
AND LAND USE**

TABLE OF CONTENTS

<u>SECTION</u>	<u>PAGE</u>
1.0 SUMMARY OF FINDINGS	1
2.0 INTRODUCTION	3
3.0 SURVEY METHODOLOGY	6
4.0 RESULTS	6
4.1 Vegetation	8
4.2 Wildlife	9
4.3 Sensitive Resources	10
4.3.1 Sensitive Habitats	11
4.3.2 Sensitive Plants	12
4.3.3 Sensitive Animals	13
4.4 Wildlife Corridors	17
5.0 REGULATORY REQUIREMENTS	17
6.0 ANTICIPATED PROJECT IMPACTS	20
6.1 Proposed Project Impacts	20
6.2 Significance Impacts	22
7.0 PROPOSED MITIGATION	23
8.0 LITERATURE CITED	27
9.0 CERTIFICATION	28
LIST OF FIGURES	
Figure 1 Regional Location	4
Figure 2 Project Location	5
Figure 3 Biological Resources	7
Figure 4 Biological Open Space	21
LIST OF TABLES	
Table 1 Biological Surveys	6
Table 2 Habitat and Impact Acreage	22
LIST OF APPENDICES	
Appendix A Plant Species Observed	
Appendix B Wildlife Species Observed	
Appendix C Sensitive Plant Species with the Potential to Occur	
Appendix D Sensitive Animal Species with the Potential to Occur	
Appendix E Sensitivity Codes	
Appendix F California Natural Diversity Data Base Field Survey Forms	

1.0 SUMMARY OF FINDINGS

The proposed project is a minor subdivision and residential development of 24.19 gross acres into three parcels. The three parcels have gross sizes of 10.46, 4.95, and 8.78 acres. The proposed project also includes biological open space easements totaling 14.9 acres. The project is located in the Community of Alpine, in East San Diego County, northeast of Interstate 8. The proposed project is located within the USGS 7.5' Alpine quad, Township 15 South, Range 2 East, Section 19. The proposed project is located within the Metro-Lakeside-Jamul portion of the Multiple Species Conservation Program (MSCP).

This report provides information regarding existing conditions, compliance with the Biological Mitigation Ordinance (BMO), Resource Protection Ordinance (RPO) and performs an impact analysis based on the current site design. This report also identifies mitigation measures that conform to the Biological Mitigation Ordinance and Resource Protection Ordinance therefore reducing any impacts to below a level of significance.

General biological surveys, sensitive plant surveys and a presence/absence survey for the Quino checkerspot were performed onsite. The biological resources on-site include six habitat types as defined by the County: southern coast live oak riparian forest, coast live-oak woodland, inland coastal sage scrub, southern mixed chaparral (granitic), disturbed, and developed habitat. Biological resources that are afforded some level of protection under the Biological Mitigation Ordinance would include the southern coast live oak riparian forest, coast live-oak woodland, coastal sage scrub and southern mixed chaparral. The site is mapped as a pre-approved mitigation area, and therefore qualifies as a Biological Core Resource Area (BRCA) in accordance with the BMO.

No state or federally listed plant or animal species were observed on-site. One sensitive plant species was observed onsite, rush chaparral-star (*Machaeranthera juncea*). This is a County list D species. Three sensitive wildlife species, the orange-throated whiptail (*Cnemidophorus hyperythrus*), Cooper's hawk (*Accipiter cooperii*), and turkey vulture (*Cathartes aura*) were observed onsite. The orange-throated whiptail and the Cooper's hawk are federal and/or state species of concern, and the turkey vulture, which is county sensitive. Twenty-three animal species have a high potential to occur onsite, and five have a moderate potential to occur. The species with a high potential to occur onsite include coast patch-nosed snake, coastal rosy boa, coastal western whiptail, northern red-diamond rattlesnake, San Diego banded gecko, San Diego ringneck snake, San Diego horned lizard, silvery legless lizard, south coast garter snake, big free-tailed bat, Dulzura pocket mouse, greater western mastiff bat, mountain lion, pocketed free-tailed bat, ringtail, small-footed myotis, southern grasshopper mouse, southern mule deer, Townsend's western big-eared bat, western red bat, Yuma myotis, golden eagle, and loggerhead shrike. The species with a moderate potential to occur include western spadefoot toad, pallid bat, San Diego desert woodrat, black-shouldered kite, and western bluebird.

Impacts to approximately 5.15 acres of granitic southern mixed chaparral on and off-site, approximately 2.82 acres of coastal sage scrub, 1.04 acres of disturbed and 0.03 acres of developed habitat will occur as a result of the proposed project. All impacts would be fully mitigated in accordance with the Biological Mitigation Ordinance. Mitigation for

impacts to 5.15 acres of southern mixed chaparral will be achieved through the onsite conservation of 5.15 acres of granitic southern mixed chaparral. Mitigation for impacts to 2.82 acres of coastal sage scrub will be achieved through the onsite conservation of 4.23 acres of coastal sage scrub. An additional 1.92 acres of southern mixed chaparral and an additional 1.2 acres of coastal sage scrub is included within the proposed open space. Additionally all of the southern coast live oak riparian forest (1.96 acres) and the coast live oak woodland (0.37 acres) is included within the proposed open space. Potential impacts to sensitive animal species observed and with a high and moderate potential to occur onsite will be mitigated by the habitat based mitigation in accordance with the BMO. Implementation of these mitigation measures will reduce impacts to below a level of significance.

2.0 INTRODUCTION

The proposed project is a minor subdivision and residential development of 24.19 gross acres into three parcels. The three parcels have gross sizes of 10.46, 4.95, and 8.78 acres. The proposed project also includes biological open space easements totaling 14.9 acres. The proposed project is for residential land use. As part of the project, residential development including building pads, road, and utilities would be graded. No off-site improvements are proposed as part of the project.

The 24.19 acre project area is located in the southeastern portion San Diego County within the Community of Alpine in the County of San Diego (Figure 1). It is located northeast of the City of El Cajon, northeast of Interstate 8. The proposed subdivision is located just west of Chocolate Canyon and just south of Chocolate Summit Drive. It is accessed by Chocolate Creek Road, which is part of the property. The proposed project is located within the Metro-Lakeside-Jamul portion of the Multiple Species Conservation Program (MSCP).

Topography, Soils, Land Use

The project area is located in the southern portion of San Diego County within the foothills and interior valleys of the region. The project area is shown on the Alpine USGS 7.5' Quadrangle (Figure 2). It is in the northeast quarter of Section 19 in Township 15 South, Range 2 East. The property includes a ridge and two steep drainages. The project area is located on the western side of Chocolate Canyon on the south-facing slope. Elevations range from 1100 to 1400 feet above mean sea level (MSL).

The soils on the property include Cieneba-Fallbrook rocky-sandy loams eroded. These soils consist of 55 percent Cieneba coarse sandy loam, and 40 percent Fallbrook sandy loam. They occur on slopes from 30 to 65 percent (Bowman 1973). Rock outcrops covering 10 percent and large boulders covering 10 percent of the surface are typical of these soils (Bowman 1973).

An ephemeral drainage runs roughly north-south through the central part of the property. A large drainage with a developed oak riparian corridor and an intermittent stream runs roughly east-west along the southern boundary of the project.

The property is largely undeveloped but the southern portion of the project area includes three small dirt roads; it also includes Chocolate Creek Road, which is also dirt.

Regional Setting

The proposed project is located within the Metro-Lakeside-Jamul portion of the Multiple Species Conservation Program (MSCP). The site is located in area of rural residential interspersed with undeveloped lands. The site is mapped as having the full range of habitat values from low to very high. The site is located within a pre-approved mitigation area; as a result the site qualifies as a Biological Resource Core Area (BRCA) as defined within Article VI.A.1.a of the Biological Mitigation Ordinance.

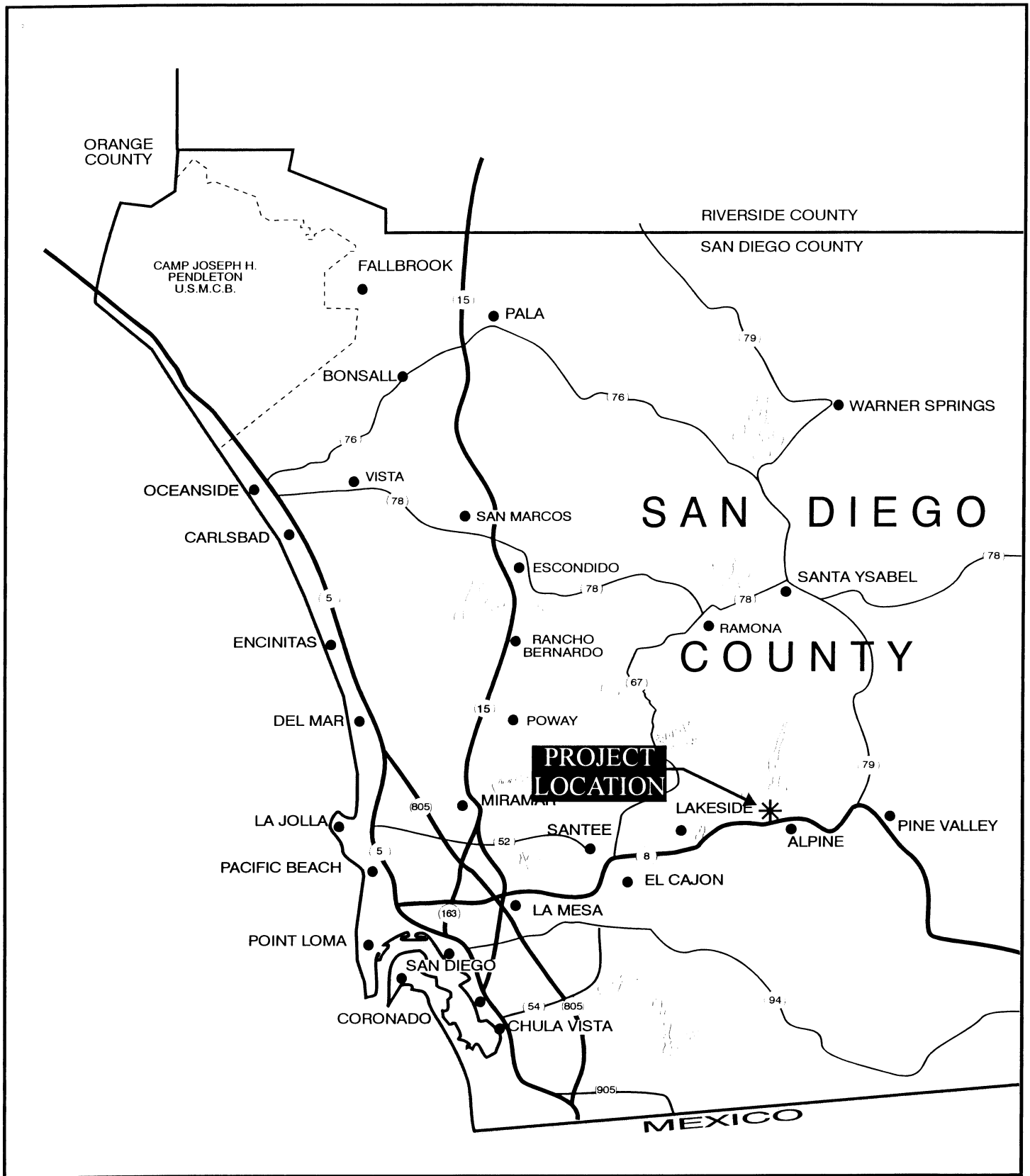
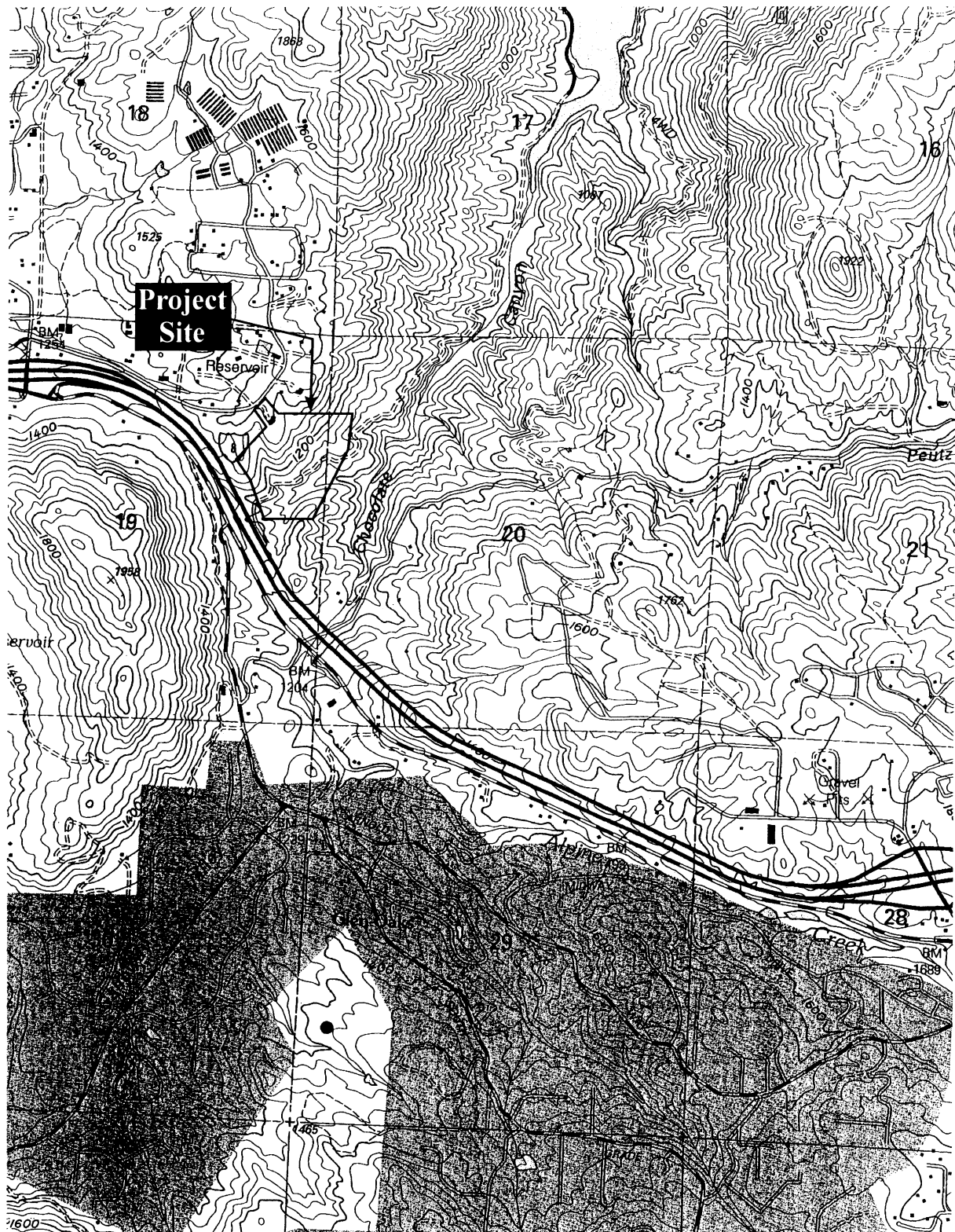


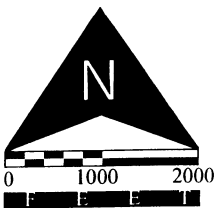
Figure 1
Regional Location Map





SOURCE: USGS 7.5' Alpine Quadrangle

Figure 2
Project Location



3.0 SURVEY METHODOLOGY

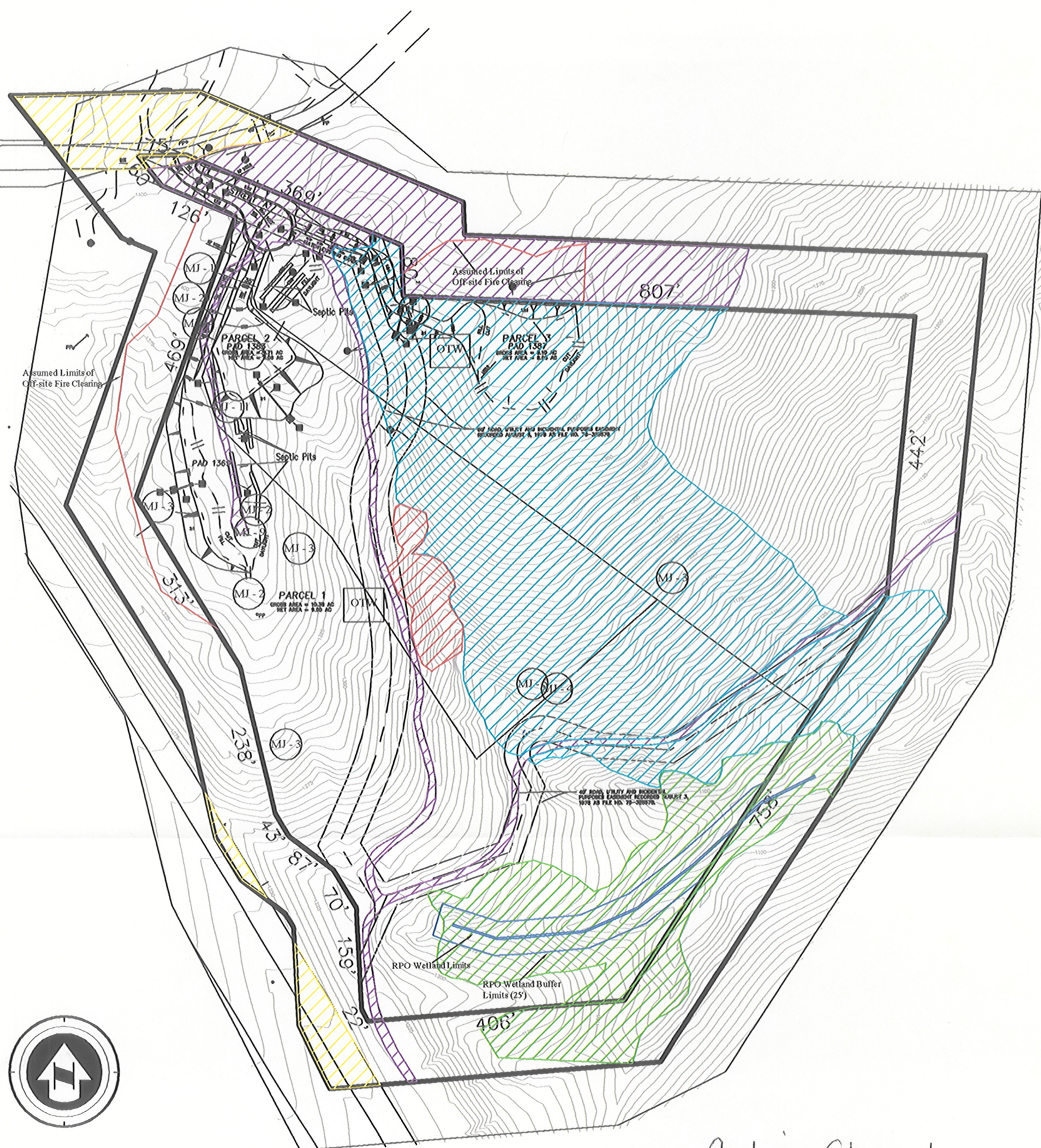
The site was surveyed on foot and habitat mapped (Figure 3 – Map Pocket). Mapping was performed following the Biological Resources Mapping Requirements (County 2002). Wildlife species were identified directly by sight or by vocalizations, and indirectly by scat, tracks, or burrows. Field notes were maintained throughout the surveys and species of interest were mapped. Surveys focused on sensitive plant and wildlife species and all species observed were noted. The presence or absence of suitable habitat for sensitive species was also identified. The primary focus of the survey was to document and map the size, location, and general quality of all habitat types and the presence or potential presence of any sensitive resources (plant or wildlife) on-site. In addition, a focused presence/absence survey was conducted for the Quino checkerspot (*Euphydryas editha quinoa*) by USFWS permitted biologist, Robin Church (TE-812206-3).

Table 1 Surveys performed on the Daoud Property (TPM 20832)						
Date	Time	Survey	Temperature (°F)	Sky	Wind (mph)	Observers
3/8/04	11:30 to 3:30	Quino/Sensitive Plants	89° to 85°	Clear	3-7	RC
3/18/04	12:00 to 2:30	Quino	71° to 73°	Light Haze	0-7	RC
3/23/04	11:00 to 1:30	Quino	71° to 69°	Overcast to Clear	0-8	RC
3/29/04	11:45 to 1:45	Quino	90° to 88°	Clear	0-6	RC
4/7/04	2:20 to 4:45	Quino	74° to 72°	Clear	2-6	RC
4/14/04	11:20 to 2:20	Quino/Sensitive Plants	74°	Clear	1-7	RC
4/23/04	9:00 – 12:24	Direct Wildlife Survey	75°-80°	Clear	0-3	JH
7/27/04	11:50 to 4:00	Sensitive Plants	82° to 89°	Clear	4-7	JH

Nomenclature for this report conforms to Hickman (1993), for plants, Holland (1986) and Oberbauer (1996) for plant communities and habitat types, American Ornithological Union (AOU 1998) for birds, Jennings (1983) and Stebbins (2003) for reptiles and amphibians, Jones (1992) for mammals, and Powell (1979) for insects.

4.0 RESULTS

The following discussion summarizes the existing biological resources on-site including habitats, vegetation and wildlife. Habitats are depicted on Figure 3.



SCALE: 1=200'

Robin Church
Robin Church, County Certified Biologist

Legend:


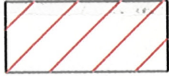

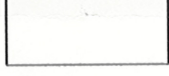




			
Southern Coast Live Oak Riparian Forest Habitat Code: 61310 1.06 acres	Coast Live Oak Woodland Habitat Code: 71160 0.37 acres	Inland Coastal Sage Scrub Habitat Code: 32520 8.68 acres	Southern Mixed Chaparral (Granitic) Habitat Code: 37121 11.97 acres
			
Disturbed Habitat Code: 11300 1.18 acres	Developed Habitat Code: 12000 0.03 acres	Rush Chaparral Star (<i>Machaeranthera juncea</i>)	Orange-throated Whiptail (<i>Cnemidophorus hyperythrus</i>)

Figure 3 - Biological Resources of the Daoud Property TPM 20832

4.1 Vegetation

Habitat descriptions are based on the County of San Diego's Biological Mapping Requirements (County 2002) and Terrestrial Vegetation Communities in San Diego County based on Holland's Descriptions (Oberbauer 1996), however, it has been shown that habitats on the project sites in San Diego County are often not pristine and rarely fit into one description. Therefore the best-fit definition based on the County's current descriptions and dominant plant species has been applied. Six habitat types occur within the project site: southern coast live-oak riparian forest, coast live oak woodland, inland coastal sage scrub, southern mixed chaparral (granitic), disturbed, and developed habitat. The vegetation habitats are depicted in Figure 3. A complete list of plant species observed on-site is included in Appendix A.

Southern Coast Live Oak Riparian Forest (Habitat Code: 61310)

Approximately 1.96 acres of southern coast live oak riparian forest occurs onsite. Southern coast live oak riparian forest habitat was identified in a deep drainage on the southeastern boundary of the property. Although the property burned in the Cedar fire of October 2003, it was observable that this habitat onsite is composed of mature coast live oaks (*Quercus agrifolia*), with an understory of poison oak (*Toxicodendron diversilobum*) and wild grape (*Vitis girdiana*).

Coast Live Oak Woodland (Habitat Code: 71160)

A small patch, 0.37 acres, of coast live oak woodland occurs in association with the ephemeral north-south drainage onsite. This habitat was dominated by mature coast live oaks with upland understory species such as caterpillar phacelia (*Phacelia cicutaria*), chaparral honeysuckle (*Lonicera interrupta*) and non-native grasses.

Granitic Southern Mixed Chaparral (Habitat Code 37121)

Granitic southern mixed chaparral dominates the site. This habitat is resprouting subsequent to the Cedar Fire. Resprouting shrubs include chamise (*Adenostoma fasciculatum*), Ramona lilac (*Ceanothus tomentosus*), mission manzanita (*Xylococcus bicolor*), sugar bush (*Rhus ovata*) and spice bush (*Cneoridium dumosum*). This habitat was dominated by wild flowers as result of the fire. These included, caterpillar phacelia, yellow pincushion (*Chaenactis glabriuscula* var. *glabriuscula*), popcorn flower (*Cryptantha* sp.), blue dicks (*Dichelostemma capitatum*), California peony (*Paeonia californica*), and California suncup (*Camissonia bisorta*). Approximately 11.97 acres of granitic southern mixed chaparral occurs onsite.

Coastal Sage Scrub (Inland) (Habitat Code: 32520)

Approximately 8.68 acres of coastal sage scrub occurs onsite. Drier southeast facing slopes were dominated by coastal sage scrub vegetation. Resprouting shrubs within this habitat include spiny redberry (*Rhamnus crocea*), flat-top buckwheat (*Erigonum fasciculatum*), coast sagebrush (*Artemisia californica*), white sage (*Salvia apiana*),

deerweed (*Lotus scoparius*) and laurel sumac (*Malosma laurina*). This habitat was also dominated by wildflowers as a result of the fire.

Disturbed Habitat (Habitat Code: 11300)

Approximately 1.18 acres of disturbed habitat occurs onsite. It is associated with Chocolate Creek Road and three additional minor dirt roads onsite.

Developed Habitat (Habitat Code 12000)

Approximately 0.03 acres of developed habitat occurs onsite in association with Chocolate Summit Drive.

Rock Outcrops

Numerous rock outcrops occur onsite, especially within the inland coastal sage scrub habitat. Rock outcrops are considered a unique microhabitat by the County. Rock outcrops add diversity to the vegetation communities by providing a discrete ecological niche for species not found elsewhere in the surrounding habitat. This niche includes shallow-soil spike-moss (*Selaginella* sp.) and lichen microhabitats. Rock outcrops also provide cover and potential nesting cavities for several wildlife species. Some reptile species are attracted to the sun-warmed surfaces of the rocks, and birds use boulders as perches and vantage points.

4.2 Wildlife

A total of 48 wildlife species were identified onsite. These included 20 invertebrate species, 5 reptile species, 19 bird species, and 4 mammal species. A complete list of wildlife species observed on-site is included as Appendix B.

Reptile species observed onsite were the orange-throated whiptail (*Cnemidophorus hyperythrus*), western fence lizard (*Sceloporus occidentalis*), side-blotched lizard (*Uta stansburiana*), southern alligator lizard (*Gerrhonotus multicarinatus*), and gophersnake (*Pituophis catenifer*). Birds that would typically occur in the habitats onsite were observed, including Anna's hummingbird (*Calypte anna*), rufous-sided towhee (*Pipilo erythrophthalmus*), California towhee (*Pipilo crissalis*), scrub jay (*Aphelocoma californica*), turkey vulture (*Cathartes aura*), and California quail (*Callipepla californicus*). Four raptor species were observed, including the American kestrel (*Falco sparverius*), Cooper's hawk (*Accipiter cooperii*), Red-shouldered hawk (*Buteo lineatus*), and Red-tailed hawk (*Buteo jamaicensis*). Mammals detected onsite include coyote (*Canis latrans*), desert cottontail rabbit (*Sylvilagus audubonii*), and pocket gopher (*Thomomys bottae*). A jaw bone was found of what appears to be an opossum (*Didelphis virginiana*).

4.3 Sensitive Resources

Sensitive or special interest plant and wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive habitats, as identified by these same groups, are those which generally support plant or wildlife species considered sensitive by these resource protection agencies or groups. Sensitive species and habitats are so called because of their limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, degradation due to development or invasion by non-native species, or a combination of all of these factors.

In addition to RPO and the MSCP the following were used in the determination of sensitive biological resources: U.S. Fish and Wildlife Service (USFWS) (USFWS 2001); California Department of Fish and Game (CDFG) (CDFG 1999, 2000 and 2001); and California Native Plant Society (CNPS 2001). An explanation of the sensitivity codes used in this report are included in Appendix E.

Applicable Resource Conservation Plans and Ordinances

In San Diego County, regulations have been adopted which define and provide protection to certain types of sensitive biological resources as follows:

Resource Protection Ordinance (RPO)

The purpose of the RPO is to protect sensitive resources and prevent their degradation and loss. The sensitive resources protected by the RPO include wetlands, wetland buffer areas, and sensitive habitat lands, which are defined as follows:

"Wetland" areas include lands which are transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are "wetlands":

- a) At least periodically, the land supports predominantly hydrophytes (plants whose habitat is water or very wet places);
- b) The substratum is predominantly undrained hydric soil; or
- c) The substratum is nonsoil and is saturated with water or covered by water at some time during the growing season of each year.

"Wetland buffer" areas include lands which provide a buffer area of an appropriate size to protect the environmental and functional habitat values of the wetland, or which are integrally important in supporting the full range of the wetland and adjacent upland biological community.

"Sensitive habitat lands" include those which support unique vegetation communities, or the habitats of rare or endangered species or sub-species of animals or plants, including the area which is necessary to support a viable population of any of

these species in perpetuity, or which is critical to the proper functioning of a balanced natural ecosystem or which serves as a functioning corridor.

Multiple Species Conservation Program (MSCP) and Biological Mitigation Ordinance (BMO)

In response to the continued loss of sensitive biological resources, especially coastal sage scrub, the County adopted the MSCP in 1997. The proposed project must conform to the MSCP Subarea Plan, and the project must demonstrate that it has incorporated avoidance measures to meet the preserve design requirements of the Plan. To implement the MSCP Subarea Plan, the County enacted the BMO. Habitats are classified in different "Tier" levels that require different levels of mitigation. Application of the BMO to individual projects is the method by which the County will achieve the conservation goals set forth in the MSCP. Mitigation requirements for different habitat types are based on the location of both the impact and the proposed mitigation. Impacts within core habitat areas or pre-approved mitigation areas require higher mitigation ratios. Conversely, more credit is allowed for preservation or mitigation within core habitat areas or pre-approved mitigation areas.

4.3.1 Sensitive Habitats

Southern coast live oak riparian forest, coast live oak woodland, coastal sage scrub and granitic southern mixed chaparral would be considered sensitive habitats in accordance with the Biological Mitigation Ordinance. Each of these are discussed below.

Southern Coast Live Oak Riparian Forest and Coast Live Oak Woodland (Tier I)

Oak woodlands in all forms are considered sensitive by the county of San Diego because of their limited distribution, their high wildlife value, and their aesthetic value. The oak woodlands onsite are southern coast live oak riparian forest and coast live oak woodland.

Southern coast live oak riparian forest may be considered wetland habitat. Wetland habitats, in general, are considered sensitive biological resources because they have been dramatically reduced in San Diego County and across the nation. Due to the regional and national loss of wetland habitat, resource agencies have a "no net loss policy" for wetlands. Wetland habitat is important because it has high levels of food and nutrients, high wildlife diversity, and it is a valuable water source in the arid climate of Southern California. This habitat's sensitivity and its ultimate reduction is evidenced by the large number of declining bird species closely associated with, or dependent on this habitat type for reproduction and ultimate success. Agencies which consider wetland habitat sensitive include the County, ACOE, USFWS, CDFG, and the EPA. Wetland habitat protection is specifically addressed by the CDFG Code, Sections 1600-1606 (Streambed Alteration Agreement) and the ACOE's Section 404 permit process (Clean Water Act).

Wetlands are defined by the presence of hydrophytic vegetation, hydric soils, and site hydrology. According to the latest ACOE (Environmental 1987) methodology all three

indicators must be present to be considered a wetland. State and Federal laws do not allow for the net loss of wetlands.

Coastal Sage Scrub (Inland) (Tier II)

Coastal sage scrub is considered a sensitive habitat within the BMO. This is a Tier II habitat.

Granitic Southern Mixed Chaparral (Tier III)

Although still a relatively plentiful habitat, granitic southern mixed chaparral is considered a sensitive habitat within the BMO. This habitat is classified as Tier III habitat.

4.3.2 Sensitive Plants

Sensitive or special interest plant species are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive plant species are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive plant species include: County list of Sensitive Plant Species (2004), CDFG (1999) and the California Native Plant Society Electronic Inventory (CNPS 2003).

Sensitive plant surveys were performed during the Quino surveys. Since both require walking intensive transects, all plants observed during the surveys were noted. An additional survey was performed in July to identify late blooming species such as rush chaparral star (*Machaeranthera juncea*). No rare, threatened, or endangered plant species were observed on-site. One sensitive plant species was observed onsite, rush chaparral-star (*Machaeranthera juncea*). This species is discussed below. Twenty-seven sensitive plant species are known from the area. All of the species would have been observable during the surveys performed onsite. Sensitive plant species with the potential to occur on-site are discussed in Appendix C.

Machaeranthera juncea (Rush chaparral-star)

Machaeranthera juncea is a perennial herb with yellow flowers on elongated branches. It is a County list D and CNPS List 4 species (limited distribution) with a R-E-D ranking of 1-1-1. This species can occur in chaparral and coastal scrub habitats; the northwestern extent of its distribution is cismontane San Diego County. Approximately 101 individual *M. juncea* plants occur within or adjacent to the site (Figure 3).

Narrow Endemic Plant Species

No narrow endemic plant species were observed onsite. All of the narrow endemic plant species listed as occurring within the Metro-Lakeside-Jamul portion of the MSCP would have been observable during the surveys

4.3.3 Sensitive Animals

Sensitive or special interest wildlife species and habitats are those which are considered rare, threatened, or endangered within the state or region by local, state, or federal resource conservation agencies. Sensitive species are so called because of their limited distribution, restricted habitat requirements, or particular susceptibility to human disturbance, or a combination of these factors. Sources used for the determination of sensitive biological resources include: USFWS (USFWS 2001), CDFG (CDFG 2000 and 2001). Additional species receive federal protection under the Bald Eagle Protection Act and the Migratory Bird Treaty Act and Convention for the Protection of Migratory Birds and Animals.

The CDFG also lists species as threatened or endangered, or candidates for listing as threatened or endangered. Lower sensitivity animals may be listed as “species of special concern” (CDFG 2000). The CDFG further classifies some species under the following categories: “fully protected”, “protected furbearer,” “harvest species,” “protected amphibian,” and “protected reptile.” The designation “protected” indicates that a species may not be taken or possessed except under special permit from the CDFG; “fully protected” indicates that a species can be taken only for scientific purposes. The designation “harvest species” indicates that take of the species is controlled by the state government.

No threatened or endangered animal species were observed on-site. Three sensitive animal species, the orange-throated whiptail (*Cnemidophorus hyperythrus*), Cooper’s hawk (*Accipiter cooperi*) and turkey vulture (*Cathartes aura*), were observed onsite. These species are discussed below.

Orange-Throated Whiptail (*Cnemidophorus hyperythrus beldingi*)

The orange throated whiptail is listed as a federal and California state Special Concern Species. It occurs coastally in extreme southern Los Angeles County south to San Diego County west of the crest of the Peninsular Ranges, especially in areas with summer morning fog. It inhabits low elevation (0 to 3000 feet) coastal sage scrub, chamise-redshank chaparral, mixed chaparral, and valley-foothill hardwood habitats. Two individuals of this species were observed onsite, in burned, regenerating coastal sage scrub habitat. This is a covered species within the MSCP.

Cooper’s Hawk (*Accipiter cooperi*)

The Cooper’s hawk when nesting is listed as a California Special Concern species by California Department of Fish and Game. This species is a year-long resident in southern California. It is most likely to occur in areas with dense stands of live oak, riparian, deciduous, or other forest habitats near water. One individual of this species was observed onsite. It flew from the highest part of the property over the coastal sage scrub and landed in the southern coast live oak riparian forest. This is a covered species within the MSCP.

Turkey Vulture (*Cathartes aura*)

The turkey vulture is a County sensitive species. According to Unitt (1984), this species is a fairly common to common spring and fall migrant, uncommon to locally common winter visitor and rare to uncommon summer resident of San Diego County. One turkey vulture was observed overhead during the wildlife surveys.

Forty-eight sensitive species with the potential to occur onsite are discussed in Appendix D. Of the forty-eight sensitive species with the potential to occur onsite, twenty-three have a high potential to occur onsite, and five have a moderate potential to occur. The species with a high potential to occur onsite include coast patch-nosed snake (*Salvadora hexalepis virgulata*), coastal rosy boa (*Charina trivirgata roseofusca*), coastal western whiptail (*Cnemidophorus tigris multiscultatus*), northern red-diamond rattlesnake (*Crotalus ruber ruber*), San Diego banded gecko (*Coleonux variegatus abbotti*), San Diego ringneck snake (*Diadophis punctatus similes*), San Diego horned lizard (*Phrynosoma coronatum blainvillei*), silvery legless lizard (*Anniella pulchra pulchra*), south coast garter snake (*Thamnophis sirtalis*), big free-tailed bat (*Nyctinomops macrotis*), Dulzura pocket mouse (*Chaetodipus californicus femoralis*), greater western mastiff bat (*Eumops perotis californicus*), mountain lion (*Felis concolor*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), ringtail (*Bassariscus astutus*), small-footed myotis (*Myotis leibii*), southern grasshopper mouse (*Onychomys torridus ramona*), southern mule deer (*Odocoileus hemionus*), Townsend's western big-eared bat (*Corynorhinus townsendii*), western red bat (*Lasiurus blossevillii*), Yuma myotis (*Myotis yumanensis*), golden eagle (*Aquila chrysaetos candensis*), and loggerhead shrike (*Lanius ludovicianus*).

The species with a moderate potential to occur include western spadefoot toad (*Scaphiopus hammondi*), pallid bat (*Antrozous pallidus*), San Diego desert woodrat (*Neotoma lepida intermedia*), black-shouldered kite (*Elanus caeruleus*), and western bluebird (*Sialia mexicana*).

All of these species with a high and moderate potential to occur onsite except the mountain lion, southern mule deer, western red bat, western bluebird, and ringtail are federal and/or state species of concern. Of these, the mountain lion is a protected species by CDFG and the others are County sensitive species. In addition, five federally listed species, Quino checkerspot butterfly (*Euphydryas editha quino*), arroyo southwestern toad (*Bufo micropscaphus californicus*), California red-legged frog (*Rana aurora draytonii*), Stephen's kangaroo rat (*Dipodomys stephensi*), and California gnatcatcher (*Polioptila californica californica*), have a low potential to occur onsite. Each of these species is discussed below.

California Gnatcatcher (*Polioptila californica*)

Status: Federally listed as Threatened, State Species of Concern

The California gnatcatcher (CAGN), a Federally Threatened species and California Species of Concern, is a small gray songbird that is a resident of scrub-dominated communities in southwestern California from the Los Angeles Basin through Baja

California, Mexico. California gnatcatcher populations have declined due to extensive loss of coastal sage scrub habitat to urban and agricultural uses. This species has a low potential to occur onsite because the coastal sage scrub habitat burned in the Cedar fire. The vegetation has not yet regenerated enough to support the species; even after the habitat recovers, there would most likely be a delay in colonization by the gnatcatcher due to the depletion of the population during the fire.

Quino Checkerspot Butterfly (*Euphydryas editha quino*)

Status: Federally listed as Endangered.

The United States Fish and Wildlife Service (USFWS) officially listed the Quino checkerspot butterfly (*Euphydryas editha quino*) as endangered on January 16, 1997 (USFWS 1997). For this reason the Quino checkerspot is protected under the provisions of the Endangered Species Act of 1973, as amended. As such, “take” of this species, either directly or indirectly, is prohibited by law. In order to help land owners in preventing an unknowing “take” of this species, the USFWS has required that land owners have a protocol survey conducted on their land prior to project implementation in order to determine the presence or absence of this species.

The quino checkerspot butterfly is one of several subspecies of *Euphydryas editha*. It is a member of the brush-footed butterfly family (Nymphalidae). The quino checkerspot is associated with a variety of habitats which include clay soil meadows, grassland, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert (Ballmer, *et al.*, 2000). Despite association with a wide range of habitat, distribution of this species is restricted to areas which support the larval host plants. The Quino’s primary host plant is *Plantago erecta*. Other possible larval host plant species include *Plantago patagonica*, *Antirrhinum coulterianum*, *Castilleja exserta* and/or *Cordylanthus rigidus* (USFWS 2002) as well as *Collinsia* and possibly other Scrophulariaceae (Ballmer *et al.* 2000). Generally the flight season for the quino checkerspot occurs from late February through April, peaking in March or April.

A protocol survey was conducted for the Quino checkerspot by Robin Church, USFWS service permitted biologist. One of the host plants, dark-tipped bird’s beak (*Cordylanthus rigidus*) was found in limited amounts onsite. No life stages of the Quino were found onsite, therefore the species has a low potential to occur.

Arroyo southwestern toad (*Bufo micrposcaphus californicus*)

Status: Federally listed as Endangered, State Species of Special Concern

The arroyo southwestern toad was listed as federally endangered in December 1994. This species is a small toad (2 to 3 inches), light greenish gray or tan with warty skin and dark spots. This species is restricted to rivers that have shallow, gravelly pools adjacent to sandy terraces. Breeding occurs on large streams with persistent water from March to mid-June. Eggs are deposited and larvae develop in shallow pools with minimal current and little or no emergent vegetation and with sand or pea gravel substrate overlain with flocculent silt. After metamorphosis (June or July), the juvenile toads remain on the

bordering gravel bars until the pool no longer persists. Juvenile and adults forage for insects on sandy stream terraces that have nearly complete closure of cottonwoods, oaks, or willows and almost no grass and herbaceous cover at ground level. Adult toads excavate shallow burrows on the terraces where they shelter during the day when the surface is damp or during longer intervals during the dry season. (Federal Register 1994) The drainage on site is narrow and steep, does not have shallow pools, lacks gravel bars and sandy terraces, and as a result does not provide suitable habitat for any of the life stages of the arroyo southwestern toad. There is a low potential for this species to occur onsite.

Stephen's kangaroo rat (*Dipodomys stephensi*)

Status: Federally listed as Endangered, State listed as Threatened

The Stephen's kangaroo rat was listed as California State threatened in 1971. It was listed as federally endangered in 1988. This species is eleven to twelve inches long. Like all kangaroo rats, it has long hind legs and small front legs and feet. They occur in the San Jacinto Valley and nearby foothill grasslands. They need sparsely vegetated, dry habitats on sandy or gravelly soils that are soft enough to dig their burrows (USFWS 2000, Burt and Grossenheider 1976). Stephen's kangaroo rats have also been known to occupy abandoned pocket gopher burrows. They feed primarily on seeds from annual grasses and forbs. Most of their habitat has been lost to agriculture and residential development (USFWS 2000). There is no grassland habitat on the Daoud property, and the soil is not sandy or gravelly; therefore, there is low potential for this species to occur onsite.

California red-legged frog (*Rana aurora draytonii*)

Status: Federally listed as Threatened, State Species of Concern

The California red-legged frog was listed as federally threatened in 1996. This species is the largest native frog in the western U.S., ranging from 1.5 to 5 inches in length. The abdomen and hind legs of the adults are predominantly red. The back has dark flecks and blotches, some with light centers, on a brown, gray, olive, or reddish background color. The habitat of the California red-legged frog contains both aquatic and riparian components. The adults require dense, shrubby, or emergent riparian vegetation closely associated with water that is deeper than 2 and 1/3 feet, slowly moving or still. The largest densities of California red-legged frogs are associated with deep-water pools with dense stands of overhanging willows and an intermixed fringe of cattails. Well-vegetated terrestrial areas within the riparian corridor may provide important sheltering habitat during the winter. They have been found up to 100 feet from water in adjacent dense riparian vegetation. The species is believed to be extirpated from the southern transverse and peninsular ranges of California, but is still present in Baja California, Mexico. On the Daoud property there are no pools, deep water, or emergent riparian vegetation. Also, the species has been extirpated from most of San Diego County. Therefore, the species has a low potential to occur.

4.4 Wildlife Corridors

The Daoud property has been mapped as having the full range of habitat values from low to very high. The site is located within a pre-approved mitigation area and as a result the site qualifies as a Biological Resource Core Area (BRCA) as defined within Article VI.A.1.a of the Biological Mitigation Ordinance. It is located within a wildlife corridor that extends from Jamul northeast to El Capitan Reservoir. The current linkage width is approximately ½ mile or 2640 feet. Three pads are proposed to be graded on the Daoud property on the northern edge of the site adjacent to an existing improved road and off-site development. This portion of the site has been mapped as low-value and disturbed habitat

5.0 REGULATORY REQUIREMENTS PERTAINING TO WETLANDS

The limits of jurisdiction for each agency is also discussed below.

Army Corps of Engineers (ACOE) – Clean Water Act

Pursuant to Section 404 of the Clean Water Act, any on-site wetlands and waters of the U.S., would be subject to permit provisions regulating activities within their boundaries. These provisions are enforced by the ACOE, as well as the EPA, with technical input from the USFWS. Three factors are considered in the designation of wetlands: the presence of hydrophytic vegetation, hydric soils, and site hydrology. According to the latest ACOE methodology, all three wetland indicators must be present to make a jurisdictional ruling (Environmental Laboratory 1987). Areas indicated as wetlands by all three factors during the rainy season may lack the indicators of hydrology and/or vegetation during the dry season, or the vegetation may have been altered or removed through human disturbance. Such areas may still be regarded as wetlands by resource agencies.

In addition, the ACOE has jurisdiction over “waters of the United States”. Waters of the United States are defined in 33 CFR part 328 (referred to as “waters”). The lateral limits of the jurisdiction of waters maybe divided into three categories, territorial seas, tidal waters and non-tidal waters. 33 CFR part 328.3 provides the definition of waters of the United States as follows:

(a) The term *waters of the United States* means

- (1) all waters which are currently used, or were used in the past, or maybe susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce, including any such waters:

- (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
 - (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
 - (iii) Which are or could be used for industrial purpose by industries in interstate commerce;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;
 - (5) Tributaries of waters identified in (a) (1) through (4) of this section;
 - (6) The territorial seas
 - (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1) through (6) of this section.

Waste treatment systems, including treatments of ponds or lagoons designed to meet the requirements if CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.

- (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding the CWA remains with the Environmental Protection Agency (EPA).
- (b) The term *wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.
 - (c) The term *adjacent* means bordering, contiguous or neighboring. Wetlands separated from other waters of the United States by man made dikes or barriers, natural river berms, beach dunes and the like are "adjacent wetlands."
 - (d) The term *high tide line* means the line of intersection of the land with the water's surface to the maximum height reached by a rising tide.....
 - (e) The term *ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of the soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.
 - (f) The term *tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun....

The limits of jurisdiction in non-tidal waters is defined in 30 CFR part 328.4 (c). When non-tidal waters occur in the absence of adjacent wetlands, the jurisdiction extends to ordinary high water mark. Based on the above definition of waters of the United States

and limits of jurisdiction, Waters of the U.S. occur onsite. The limits of jurisdiction of waters of the U.S. would be the same as for the RPO wetland identified in Figure 3.

California Department of Fish and Game – Streambed Alteration Program

The CDFG regulates wetlands under Sections 1600 - 1616 of the California Fish and Game Code through their Streambed Alteration Agreement Program. Any alteration of any stream course within the State of California requires a Streambed Alteration Agreement from the CDFG. Section 1602 specifically states: “It is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity...”

A stream is defined by the California Code of Regulations (14 CCR 1.72) as a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic wildlife. This includes watercourses having a surface or subsurface flow that supports or has supported riparian habitat.

The limits of CDFG jurisdiction are defined in the code as the bed, channel, or bank of any river, stream or lake designated by the department in which there is at any time existing fish or wildlife resource or from which these resources derive benefit

The limits of the CDFG jurisdiction onsite would be the same as the limits of the southern coast live oak riparian forest. In addition, the CDFG would take jurisdiction over the ephemeral drainages onsite.

County of San Diego Resource Protection Ordinance

The County of San Diego Resource Protection Ordinance defines wetlands under Article II, item 16. as: “All lands which are transitional between terrestrial and aquatic where the water table is usually at or near the surface or where the land is covered by water. All lands having one or more of the following attributes are ‘wetlands’:

- a. At least periodically, the land supports predominately hydrophytes;
- b. The substratum is predominantly undrained hydric soils; or
- c. The substratum is nonsoil and is saturated with water or covered by water at some time during the growing season each year.

The intermittent drainage onsite is essentially devoid of hydrophytic vegetation, however does contain non-soil (sand) within the bed of the creek, therefore the limits of jurisdiction are the ordinary high water mark. The stream channel averages approximately 3 feet in width. The approximate limits of the RPO wetland onsite are depicted in Figure 3.

6.0 ANTICIPATED PROJECT IMPACTS

Impacts on biological resources can be categorized as either direct, indirect, or cumulative. Direct impacts are a result of project implementation, and generally include: the loss of vegetation and sensitive habitats and populations; the introduction of non-native species which may out-compete and displace native vegetation; activity-related to mortalities of wildlife; loss of foraging, nesting or burrowing habitat; destruction of breeding habitats; and fragmentation of wildlife corridors. Indirect impacts occur as a result of the increase in human encroachment in the natural environment and include: off-road vehicle use which impacts sensitive plant or animal species; harassment and or collection of wildlife species; intrusion and wildlife mortality by domestic pets in open space areas following residential development; increased noise and lighting; and inadvertent increased wildlife mortalities along roads. Cumulative impacts occur as a result of on-going direct and indirect impacts for unrelated or fragmented projects overall. Cumulative impacts are assessed on a regional basis and determined the overall effect of numerous activities on a sensitive resource over a larger area.

Generally, there are three levels of adverse impacts associated with biological resources: significant, locally important, and not significant. The County of San Diego adopted the regional Multiple Species Conservation Program and Subarea Plan in 1997. To implement the Subarea Plan the County enacted the Biological Mitigation Ordinance. These documents identify biological resources and, indirectly, thresholds for significance. Habitats are classified in different tier levels which require different levels of mitigation. Habitats within Tiers I to III, require mitigation under the Biological Mitigation Ordinance and therefore are considered significant.

These levels of impacts were applied to the project site and are used below in the discussion of specific potential impacts. Figure 3 details the proposed impact areas.

6.1 Proposed Project and Potential Impacts

The proposed project is a minor subdivision and residential development of 24.19 gross acres into three parcels. The three parcels have gross sizes of 10.46, 4.95, and 8.78 acres. The proposed project also includes biological open space easements totaling 14.9 acres (Figure 4). As part of the project, residential development including building pads, roads, and utilities would be graded. Off-site impacts resulting from fire clearing for Parcels 1 and 3 will occur.

The project is located within the Metro-Lakeside-Jamul portion of the MSCP and qualifies as a BRCA in accordance with the Biological Mitigation Ordinance. Table 2 identifies the potential impacts as a result of the proposed project. The mitigation ratios are based on the premise that both the impact and mitigation sites are BRCA's. For the purposes of this analysis all of the area outside of the proposed open space is assumed to be impacted with the exception of the area encompassed by existing road and utility easements (Figure 4). The habitat included within the road and utility easements are deemed impact neutral except where the project proposes impacts. The presence of the utility easements prevents placing these areas in open space.

<p align="center">Table 2 Habitat Acreages and Potential Impacts</p>					
Habitat	Total Acres	Direct Impacts (acres)	Mitigation Ratio	Onsite Conservation (acres)	Impact Neutral (acres)
Southern Coast Live Oak Riparian Forest (Tier I)	1.96	0	2:1	1.96	0
Coast Live Oak Woodland (Tier I)	0.37	0	2:1	0.37*	*
Inland Coastal Sage Scrub (Tier II)	8.68	2.82	1.5:1	5.43	0.43
Granitic Southern Mixed Chaparral (Tier III)	11.97	4.3	1:1	7.07	0.6
Disturbed Habitat (Tier IV)	1.18	0.59	NA	0.07	0.52
Developed Habitat (Tier IV)	0.03	0.03	NA	NA	NA
Total	24.19	7.74		14.9	1.55
Off-site impacts from Fire Clearing					
<ul style="list-style-type: none"> Granitic Southern Mixed Chaparral (Tier III) 	NA	0.85	1:1	NA	NA
<ul style="list-style-type: none"> Disturbed 	NA	0.45	NA	NA	NA

* A negligible amount (< 0.01 acres) is within the road easement.

6.2 Significance Of Impacts

The following section discusses the significance of potential impacts to the resources onsite. Impacts will occur to granitic southern mixed chaparral, inland coastal sage scrub, disturbed and developed habitats.

Coastal Sage Scrub – Inland (Tier II)

Impacts to approximately 2.82 acres of coastal sage scrub would be considered significant. These impacts would require mitigation at a 1.5:1 ratio in accordance with the BMO.

Granitic Southern Mixed Chaparral (Tier III)

Impacts to approximately 5.15 acres of granitic southern mixed chaparral would be considered significant. These impacts would require mitigation at a 1:1 ratio in accordance with the BMO.

Disturbed Habitat (Tier IV)

Impacts to the approximately 1.04 acres of disturbed habitat onsite would not be considered significant and would not require mitigation.

Developed Habitat (Tier IV)

Impacts to the approximately 0.03 acres of developed habitat onsite would not be considered significant and would not require mitigation. The developed portion of the site will continue to be used as it is currently being used. No significant impacts will occur.

Sensitive Plant Species

One sensitive plant species was observed onsite, Rush chaparral-star. This is a County List D Species. Approximately 101 individuals of this species occur onsite. Impacts to approximately 59 will occur as a result of grading for the proposed project and an additional 29 may be impacted as a result of fire clearing. These impacts would be considered significant.

Sensitive Wildlife Species

Three sensitive wildlife species, the orange-throated whiptail, Cooper's hawk, and turkey vulture, were observed onsite. Potential impacts to sensitive wildlife species observed and with a high and moderate potential to occur onsite would be considered significant.

Wildlife Corridors

The proposed project will develop 700 feet of the existing corridor, for a length of 250 feet, at the projects widest. This portion is also the western most edge closest to Interstate 8. The project will develop 300 feet at the projects narrowest for a distance of 500 feet. The proposed development is located within the northwest edge of the wildlife corridor adjacent to the existing development. The proposed sight layout allows for the corridor width to be reduced to no less than 1940 feet for a distance of 250 feet. The corridor then expands to a 2340 feet for 500 feet. The remaining 500 feet of the property is within proposed open space and will not reduce the corridor width. In addition, the house pads are at the top of the canyon further reducing impacts on the corridor which is constrained to the width of the freeway under pass off-site to the south where Interstate 8 spans Chocolate Canyon Creek. The reduction in the corridor width would not be considered a significant impact.

7.0 PROPOSED MITIGATION

Under CEQA, mitigation is required for all significant biological impacts (i.e. impacts within highly constrained areas). In addition, the CDFG 1600 and the ACOE 404 permit process generally require mitigation for the loss of wetland resources. The following mitigation measures are recommendations to offset significant impacts. Recommendations are also given to offset locally important biological impacts. Although mitigation measures are not often required for locally important impacts, local jurisdictions often implement these measures to minimize cumulative impacts within the region.

According to Appendix G of the State CEQA guidelines, the proposed project would have a potentially significant impact to onsite biological resources if it would:

- Have a substantial adverse affect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Resource Protection Ordinance

Under the RPO (discussed above), development of wetlands, wetland buffer areas, and sensitive habitat lands is restricted, as follows:

Within *wetlands*, the RPO restricts uses to aquaculture, scientific research, educational or recreational uses, or wetland restoration, and imposes further limitations which include, in particular, that grading, filling and construction is not permitted.

Within *wetland buffer areas*, the RPO allows uses permitted in wetland areas, plus access paths and other improvements necessary to protect adjacent wetlands.

Biological Mitigation Ordinance

The BMO requires that mitigation be provided, in accordance with ratios which take into account factors such as: (1) What "Tier" the impacted habitat falls into; (2) whether the impacted resources are located within a Biological Resources Core Area (BRCA) and (3) whether the mitigation land would be located onsite or offsite. As discussed in Section 2.0, Regional Setting, the project site qualifies as a BRCA.

Under CEQA, mitigation is required for all significant biological impacts. Mitigation, per resource, is discussed below with corresponding level of significance after mitigation.

Coastal Sage Scrub – Inland (Tier II)

Approximately 2.82 acres of this habitat will be impacted as a result of the proposed project. This impact will be mitigated at a 1.5:1 ratio through the onsite conservation of 4.23 acres of coastal sage scrub. An additional 1.2 acres of this habitat are encompassed within the proposed open space. The remaining 0.43 acres is encompassed within the existing road and utility easements and is deemed impact neutral. The implementation of this mitigation will reduce the impacts to below a level of significance.

Granitic Southern Mixed Chaparral (Tier II)

Approximately 5.15 acres of this habitat on and off-site will be impacted as a result of the proposed project. Mitigation for this impact will be at a 1:1 ratio through the onsite conservation of 5.15 acres of granitic southern mixed chaparral. An additional 1.92 acres is included within the proposed open space. The remaining 0.6 acres is encompassed within the existing road and utility easements and is deemed impact neutral. The implementation of this mitigation will reduce the impacts to below a level of significance.

Sensitive Plant Species

One sensitive plant species was observed onsite, rush chaparral star. Approximately 57 of the individuals onsite will be impacted by grading. An additional 27 individuals on and off-site may be impacted by fire clearing. Approximately 15 individuals of this species were identified within the proposed open space. This is a County List D species. The BMO specifically states “Sensitive plant species as defined, in groups C and D shall be protected by using the design requirements and habitat based mitigation requirements as set forth in Articles V and VI (of the BMO).” Section V, Project Design Criteria states that the project design shall be sited in areas in which minimize impact to habitat and that clustering shall be considered. The project has located the pads as close to the northern property boundary, existing improved road and off-site development, minimizing impacts to the habitats onsite. This allows over half of the site to be placed into open space and aids in the preservation of the wildlife corridor. Although the design impacts 85% of the population observed onsite, other design considerations such as minimizing impacts to habitat overall, preservation of wildlife corridors and avoidance of steep slopes precludes designing the project to reduce the impacts. Impacts to this population are not likely to jeopardize the continued survival of the species in the County.

Open Space Design

The open space onsite is composed of 3 areas totaling 14.9 acres. The areas are bisected by road and utility easements. No improvements are planned to those easements at this time, however their existence precludes placing those areas within open space. Until such time as improvements are performed within those easements the 14.9 acres and the easements will function as one large block of open space.

With implementation of the proposed mitigation measures, impacts to biological resources will be mitigated to below a level of significance.

8.0 LITERATURE CITED

- AOU. American Ornithological Union. 1998. Forty-second Supplement to the American Ornithologists' Union Checklist of North American Birds.
- Bowman, R. H. 1973. *Soil Survey, San Diego Area, California, Part 1*. United States Department of Agriculture. 104 pp. + appendices.
- CDFG. California Department of Fish and Game. 1999. List of CDFG Special Status Plants, Animals and Natural Communities of San Diego County, California Natural Diversity Data Base, CDFG Natural Heritage Division, Sacramento.
- California Department of Fish and Game. 1999. "Endangered, Threatened and Rare Plants of California." State of California Dept. of Fish and Game, Natural Heritage Division, Plant Conservation Program, Sacramento. April 1999.
- California Department of Fish and Game. 2000. CDFG Natural Diversity Data Base. Special Animals. July 2000.
- California Department of Fish and Game. 2001. "State and Federal Endangered, Rare, and Threatened Animals of California." State of California Resources Agency, Sacramento. October 2001.
- CNPS. 2003. *Inventory of Rare and Endangered Plants of California* (sixth edition-electronic version). Rare Plant Scientific Advisory Committee, David P. Tibor, Convening Editor. California Native Plant Society. Sacramento, CA x+388pp.
- County of San Diego. Biological Mapping Requirements, June 2002.
- County of San Diego. Biological Mitigation Ordinance, Ordinance No. 8845.
- County of San Diego 1997. Multiple Species Conservation Program Subarea Plan.
- County of San Diego. Resource Protection Ordinance, Ordinance No. 7968.
- Federal Register 1994. Endangered and Threatened Wildlife and Plants; Determination of Endangered Status for the Arroyo Southwestern Toad. Final Rule. Federal Register Vol. 59, No. 241, Pages 64859 to 64867.
- Hickman, J. C. 1993. The Jepson Manual Higher Plants of California. University of California Press, Berkeley.
- Holland, R. F. 1986. *Preliminary Descriptions of the Terrestrial Natural Communities of California*. Non-game Heritage Program, State of California Department of Fish and Game, Sacramento, CA. 157 p.
- Jennings, M. R. 1983. An Annotated Checklist of the Amphibians and Reptiles of Southern California. California Department of Fish and Game 69(3):151-171.

- Jones, J.K., *ET AL.* 1992. Revised Checklist of North American Mammals North of Mexico, 1991. Occasional Papers The Museum Texas Tech. University. Number 146. February 7, 1992.
- Oberbauer, T. 1996. *Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions*. San Diego Association of Governments, San Diego, CA 6 p.
- Powell, J.A., C.L. Hogue. 1979. California Insects. University of California Press, Berkeley.
- San Diego County (SDCO). 2004. bat inventory of the San Diego County MSCP area. Online www.sdcounty.ca.gov/dplu/ MSCP portal.
- Stebbins, R. C. 2003. Field Guide to Western Reptiles and Amphibians Houghton Mifflin Co., Boston.
- Unitt, P. 1984. The Birds of San Diego County. Memoir 13, San Diego Society of Natural History.
- USFWS. U.S. Fish and Wildlife Service. 2000. Stephen's kangaroo rat web-page, online.
- USFWS. U.S. Fish and Wildlife Service. 2001. U.S. Endangered, Threatened and Candidate Plant and Animal Species by State and Lead Region. U.S. Department of the Interior. United States Fish and Wildlife Service Threatened and Endangered Species System, 12/2001.

9.0 CERTIFICATION

This report has been prepared by Robin Church, County Certified Biologist, and Jane Higginson.

APPENDIX A
PLANTS OBSERVED

APPENDIX A PLANT SPECIES OBSERVED ON THE DAOUD PROPERTY – TPM 20832			
Family Name	Species Name	Common Name	Habitat
Anacardiaceae	<i>Malosma laurina</i>	Laurel Sumac	CSS
Anacardiaceae	<i>Rhus ovata</i>	Sugar Bush	CSS
Anacardiaceae	<i>Toxicodendron diversilobum</i>	Western Poison-Oak	SMC, SCLORF
Asteraceae	<i>Artemisia californica</i>	Coastal Sagebrush	CSS
Asteraceae	<i>Baccharis sarothroides</i>	Broom Baccharis	CSS
Asteraceae	<i>*Centaurea sp.</i>	Star-thistle	CSS,DS
Asteraceae	<i>Chaenactis glabriuscula</i> var. <i>glabriuscula</i>	Yellow Pincushion	CSS
Asteraceae	<i>Gutierrezia californica</i>	California Matchweed	CSS
Asteraceae	<i>Hazardia squarrosa</i> var. <i>grindelioides</i>	Sawtooth Goldenbush	CSS
Asteraceae	<i>Helianthus gracilentus</i>	Slender Sunflower	CSS
Asteraceae	<i>Machaeranthera juncea</i> 4 1-1-1	Rush Chaparral-star, Rush-like Bristleweed	CSS,DS
Asteraceae	<i>Malacothrix californica</i>	Desert Dandelion	CSS
Asteraceae	<i>Porophyllum gracile</i>	Odora	CSS
Boraginaceae	<i>Cryptantha sp.</i>	Cryptantha	SMC
Brassicaceae	<i>*Brassica nigra</i>	Black Mustard	SMC,DS
Brassicaceae	<i>*Capsella bursa-pastoris</i>	Shepherd's Purse	CSS
Caprifoliaceae	<i>Lonicera interrupta</i>	Chaparral Honeysuckle	SMC,CSS
Caryophyllaceae	<i>Silene sp.</i>	Pink	SCLORF
Chenopodiaceae	<i>*Salsola tragus</i>	Russian-thistle, Tumbleweed	CSS,DS
Convolvulaceae	<i>Calystegia macrostegia</i>	Morning-glory	CSS,DS
Cucurbitaceae	<i>Marah macrocarpus</i> var. <i>macrocarpus</i>	Manroot, Wild-cucumber	CSS
Ericaceae	<i>Xylococcus bicolor</i>	Mission Manzanita	SMC,CSS
Euphorbiaceae	<i>Chamaesyce micromera</i>	Sonora Sand Mat	DS,CSS
Fabaceae	<i>Lotus scoparius</i> var. <i>brevialatus</i>	Deerweed	CSS,DS
Fabaceae	<i>Lotus strigosus</i>		CSS
Fabaceae	<i>Lupinus bicolor</i>	Miniature Lupine	CSS
Fabaceae	<i>Lupinus hirsutissimus</i>	Stinging Lupine	CSS
Fabaceae	<i>Lupinus longifolius</i>	Pauma Lupine	CSS
Fagaceae	<i>Quercus agrifolia</i> var. <i>agrifolia</i>	Coast Live Oak, Encina	SCLORF, OW
Hydrophyllaceae	<i>Emmenanthe penduliflora</i>	Whispering Bells	CSS

	APPENDIX A PLANT SPECIES OBSERVED ON THE DAOUD PROPERTY – TPM 20832		
Hydrophyllaceae	<i>Phacelia cicutaria</i> var. <i>hispida</i>	Caterpillar Phacelia	CSS
Hydrophyllaceae	<i>Phacelia parryi</i>	Parry's Phacelia	CSS
Lamiaceae	<i>Salvia apiana</i>	White Sage	CSS
Nyctaginaceae	<i>Boerhavia coulteri</i>	Coulter's Ringstem	CSS
Onagraceae	<i>Camissonia bistorta</i>	California Sun Cup	SMC,CSS
Paeoniaceae	<i>Paeonia californica</i>	California Peony	SMC,CSS
Platanaceae	<i>Platanus racemosa</i>	Western Sycamore	SCLORF
Polemoniaceae	<i>Navarretia hamata</i> ssp. <i>hamata</i>	Hooked Skunkweed	DS
Polygonaceae	<i>Eriogonum fasciculatum</i>	California Buckwheat	CSS
Portulacaceae	<i>Claytonia perfoliata</i>	Miner's-lettuce	CSS
Rhamnaceae	<i>Ceanothus tomentosus</i>	Ramona-lilac	SMC
Rhamnaceae	<i>Rhamnus crocea</i>	Spiny Redberry	CSS
Rosaceae	<i>Adenostoma fasciculatum</i>	Chamise	SMC
Rutaceae	<i>Cneoridium dumosum</i>	Coast Spice Bush, Bush-rue	SMC,CSS
Scrophulariaceae	<i>Antirrhinum nuttallianum</i> ssp. <i>nuttallianum</i>	Nuttall's Snapdragon	CSS
Scrophulariaceae	<i>Cordylanthus rigidus</i> ssp. <i>setigerus</i>	Dark-tip Bird's Beak	CSS
Scrophulariaceae	<i>Mimulus brevipes</i>	Slope Semiphore	CSS
Solanaceae	<i>Datura wrightii</i>		CSS
Solanaceae	* <i>Nicotiana glauca</i>	Tree Tobacco	CSS
Solanaceae	<i>Solanum sp.</i>		CSS
Vitaceae	<i>Vitis girdiana</i>	Desert Wild Grape	SCLORF
Agavaceae	<i>Yucca whipplei</i>	Our Lord's Candle	CSS
Liliaceae	<i>Calochortus sp.</i>	Calochortus	CSS
Poaceae	* <i>Avena fatua</i>	Wild Oat	CSS,SMC
Poaceae	* <i>Bromus madritensis</i> ssp. <i>rubens</i>	Foxtail Chess	DS,SMC, CSS
Themidaceae	<i>Dichelostemma capitatum</i>	Blue Dicks	CSS,SMC

*= Non-native plant species

CSS= Coastal sage scrub

SMC= Southern mixed chaparral

OW= Oak woodland

SCLORF= Southern coast live oak riparian forest

DS= Disturbed

APPENDIX B

WILDLIFE SPECIES OBSERVED

APPENDIX B

WILDLIFE SPECIES OBSERVED ON THE DAOUD PROPERTY -- TPM 20832

Common Name	Scientific Name	Habitat Observed *	# Observed (estimate)
Insects			
Anise swallowtail	<i>Papilio selicaon</i>	SMC	3
Ant	Family <i>Formicidae</i>	CSS,DS,SMC	Many
Beetles	Order <i>Coleoptera</i>	SMC,CSS,SCLORF	Many
Bumble bee	<i>Bombus fervidus</i>	SMC	2
Cabbage white	<i>Artogeia rapae</i>	SMC,DS,CSS	Many
Common blue darner	<i>Aeshna multicolor</i>	SCLORF	1
Common white	<i>Pontia protodice</i>	CSS,SCLORF	2
Dragonfly	Suborder <i>Anisoptera</i>	CSS,SCLOF	3
Fly	Family <i>Muscidae</i>	SMC,DS,CSS	Many
Funereal duskywing	<i>Erynnis funeralis</i>	SMC,CSS	6
Grasshopper	<i>Icterus bullockii</i>	SMC, CSS,DS	Many
Honey bee	<i>Apis mellifera</i>	SMC,CSS,DS	4
Lady	<i>Vanessa sp.</i>	SMC	5
Ladybug	Family <i>Coccinellidae</i>	SMC,CSS,DS	Many
Lorquin's admiral	<i>Basilarchia lorquini</i>	CSS,SMC	3
Sara orangetip	<i>Anthocharis sara</i>	SMC,CSS,SCLORF	10
Southern blue	<i>Glaucopsyche lygdamus australis</i>	SMC	2
Sphinx moth caterpillar	Family <i>Sphingidae</i>	SMC,CSS	5
Western elfin	<i>Callophrys augustus</i>	CSS	1
Western tiger swallowtail	<i>Papilio rutulus</i>	SCLORF	1
Amphibians			
None detected			
Reptiles			
Common side-blotched lizard	<i>Uta stansburiana</i>	DS	1
Gophersnake	<i>Pituophis catenifer</i>	CSS	1 Dead
Orange throated whiptail*	<i>Cnemidophorus hyperythrus</i>	CSS	4
Southern alligator lizard	<i>Gerrhonotus multicarinatus</i>	SCLORF	1 Dead
Western fence lizard	<i>Sceloporus occidentalis</i>	DS,SMC,CSS	5
Birds			
American kestrel	<i>Falco sparverius</i>	DS,SCLORF	1
Anna's hummingbird	<i>Calypte anna</i>	DS,SCLORF	3
Ash-throated flycatcher	<i>Myiarchus cinerascens</i>	SCLORF	1
Blue grosbeak	<i>Guiraca caerulea</i>	CSS,SCLORF	1
California quail	<i>Callipepla californica</i>	DS	2
California towhee	<i>Pipilo crissalis</i>	SMC,DS	3
Common raven	<i>Corvus corax</i>	SMC,DE,DS,CSS,SCLORF	2
Cooper's hawk*	<i>Accipiter cooperii</i>	DS,CSS,SCLORF	1
House finch	<i>Carpodacus mexicanus</i>	DE,DS	3
House wren	<i>Troglodytes aedon</i>	SCLORF	1
Mourning dove	<i>Zenaida macroura</i>	DE,DS,CSS,SCLORF	5
Northern mockingbird	<i>Mimus polyglottos</i>	DS	4
Red-shouldered hawk*	<i>Buteo lineatus</i>	DS	1
Red-tailed hawk	<i>Buteo jamaicensis</i>	SMC,DE,DS,CSS,SCLORF	1
Rufous-sided towhee	<i>Pipilo erythrophthalmus</i>	SCLORF	1
Scrub jay	<i>Aphelocoma californica</i>	SMC,SCLORF	4
Song sparrow	<i>Melospiza melodia</i>	SCLORF	1

APPENDIX B			
WILDLIFE SPECIES OBSERVED ON THE DAOUD PROPERTY -- TPM 20832			
Common Name	Scientific Name	Habitat Observed *	# Observed (estimate)
Turkey Vulture*	<i>Cathartes aura meridionales</i>	OH	1
Western tanager	<i>Piranga ludoviciana</i>	SCLORF	1
Mammals			
Coyote	<i>Canis latrans clepticus</i>	CSS	1 Set tracks, 1 Scat
Desert cottontail rabbit	<i>Sylvilagus audubonii</i>	SMC	1
Opossum	<i>Didelphis virginiana</i>	CSS	1 Jaw bone (?)
Valley or Botta's pocket gopher	<i>Thomomys bottae</i>	SMC, CSS	Many

SMC= Sothern Mixed Chaparral

DE = Developed

DS = Disturbed

CSS = Inland coastal sage scrub

SCLORF = Southern coast live oak riparian forest

OH= Overhead

*= Sensitive species

APPENDIX C

**SENSITIVE PLANT SPECIES
WITH THE POTENTIAL TO OCCUR**

APPENDIX C						
SENSITIVE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO						
DAOUD PROPERTY - TPM 20832 (USGS Alpine QUAD)						
Species	Growth form/Bloom Period	CNPS	R-E-D	State	Federal	Potential to Occur Onsite
<i>ACANTHOMINTHA ILICIFOLIA</i> "San Diego thorn-mint"	Annual herb April - June	1B	2-3-2	CE	FT	Low, this species would have been observable during the survey and was not observed onsite.
<i>ASTRAGALUS DEANEI</i> "Dean's milk-vetch"	Perennial herb February - May	1B	3-3-3	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>ASTRAGALUS OOCARPUS</i> "San Diego milk-vetch"	Perennial herb May - August	1B	3-2-3	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>BACCHARIS VANESSAE</i> "Encinitas baccharis"	Shrub (deciduous) August - November	1B	2-3-3	CE	FT	Low, this species would have been observable during the survey and was not observed onsite.
<i>BRODIAEA ORCUTTII</i> "Orcutt's brodiaea"	Perennial herb (bulbiferous) May - July	1B	1-3-2	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>CEANOTHUS CYANEUS</i> "Lakeside ceanothus"	Shrub (evergreen) April - June	1B	3-2-2	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>CHAMAEBATIA AUSTRALIS</i> "southern mountain misery"	Shrub (evergreen) blooms Nov-May	4	1-2-1	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>CHORIZANTHE LEPTOTHECA</i> "Peninsular spineflower"	Annual herb blooms May-August	4	1-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>CLARKIA DELICATA</i> "delicate clarkia"	Annual herb April - June	1B	2-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>DUDLEYA VARIEGATA</i> "variegated dudleya"	Perennial herb May - June	1B	2-2-2	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>GITHOPSIS DIFFUSA</i> SSP. <i>FILICAULIS</i> "Mission Canyon bluecup"	Annual herb April - June	3	?-3-3	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>HARPAGONELLA PALMERI</i> "Palmer's grapplinghook"	Annual herb blooms March-May	4	1-2-1	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>HORKELIA TRUNCATA</i> "Ramona horkelia"	Perennial herb blooms May-June	1B	3-1-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>LEPECHINIA CARDIOPHYLLA</i> "heart-leaved pitcher sage"	Shrub, blooms April-July	1B	3-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>MONARDELLA HYPOLEUCA</i> SSP. <i>LANATA</i> "felt-leaved monardella"	Perennial herb (rhizomatous) June - August	1B	2-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>MUILLA CLEVELANDII</i> "San Diego goldenstar"	Perennial herb May	1B	2-3-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.

APPENDIX C
SENSITIVE SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO
DAOUD PROPERTY - TPM 20832 (USGS Alpine QUAD)

Species	Growth form/Bloom Period	CNPS	R-E-D	State	Federal	Potential to Occur Onsite
<i>NOLINA CISMONTANA</i> Dice "chaparral nolina"	Shrub (evergreen) blooms May-July	1B	3-2-3	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>NOLINA INTERRATA</i> "Dehesa nolina"	Perennial herb June - July	1B	3-3-2	CE	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>PIPERIA COOPERI</i> "chaparral rein orchid"	Perennial herb blooms March-June	4	1-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>PIPERIA LEPTOPETALA</i> "Narrow-petaled rein orchid"	Perennial herb blooms May-July	4	1-1-3	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>POLYGALA CORNUTA</i> "Fish's milkwort"	Shrub (deciduous), blooms May-August	4	1-1-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>QUERCUS ENGELMANNII</i> "Engelmann oak"	Tree (deciduous) March - May	4	1-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>RIBES CANTHARIFORME</i> "Moreno currant"	Shrub (deciduous) February - April	1B	3-1-3	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>SATUREJA CHANDLERI</i> "San Miguel savory"	Perennial herb March - July	1B	2-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>SCUTELLARIA BOLANDERI</i> "southern skullcap"	Perennial herb (rhizomatous) June - August	1B	2-2-2	None	None	Low, this species would have been observable during the survey and was not observed onsite.
<i>SENECIO GANDERI</i> "Gander's ragwort"	Perennial herb April - May	1B	3-2-3	CR	SOC	Low, this species would have been observable during the survey and was not observed onsite.
<i>TETRACOCCLUS DIOICUS</i> "Parry's tetracoccus"	Shrub (deciduous) April - May	1B	3-2-2	None	SOC	Low, this species would have been observable during the survey and was not observed onsite.

APPENDIX D

**SENSITIVE WILDLIFE SPECIES
WITH THE POTENTIAL TO OCCUR**

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE
DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
INSECTS				
Hermes copper	<i>Lycaena hermes</i>	SOC/CSC	Coastal sage scrub, mixed chaparral and chamise chaparral; 0-3000ft. Larval host plant mature Rhamnus crocea.	Low potential to occur. Host plant burned and will need 18 years to reach adequate maturity
Quino checkerspot	<i>Euphydryas editha quino</i>	FE/SOC	Open shrub habitats, primary host plant is Plantago erecta	Low potential to occur. Focused survey did not reveal Quino or host plant.
Robinson's rain beetle	<i>Phobetus robinsoni</i>	--/--	Riparian and desert washes in flat slopes (<10%). No special soil requirements. 1000-3000 ft.	Low potential to occur. Riparian habitat exists, but slopes are >10%.
AMPHIBIANS				
Arroyo southwestern toad	<i>Bufo microscaphus californicus</i>	FE/CSC	Semi-arid regions near washes or intermittent streams. Habitats used include valley-foothill and desert riparian as well as a variety of more arid habitats including desert wash, palm oasis, and Joshua tree, mixed chaparral and sagebrush; 500-3000ft. Nocturnal.	Low potential to occur. Drainage is steep-sided and narrow, lacks sand or gravel bars.
California red-legged frog	<i>Rana aurora draytonii</i>	FT/CSC	Inhabits quite pools of streams, marshes, and occasionally ponds; 500-3000ft.	Low potential to occur. No deep water or emergent vegetation, and species is believed to be extirpated from area.
Large-blotched salamander	<i>Ensatina eschscholtzi klauberi</i>	SOC/CSC	Inhabits forests, shaded canyons, oak woodland and chaparral. Found under rotting logs, bark and rocks; 500-3000ft.	Low potential to occur; no appropriate habitat onsite due to Cedar Fire.
Western spadefoot toad	<i>Scaphiopus hammondi</i>	SOC/CSC	Grassland situations can occasionally occur in valley-foothill hardwood woodlands. Populations may persist a few years in orchard-vineyard habitats; 0-3000ft.	Moderate potential to occur. Mesic hardwood present but site lacks grassland.
REPTILES				
Coast patch-nosed snake	<i>Salvadora hexalepis virgultea</i>	SOC/CSC	Grass, chaparral, woodland, desert and coastal sage scrub. Found near rock outcrops with adjacent seasonal drainages; 0-3000ft.	High potential to occur onsite. Appropriate habitat exists.
Coastal rosy boa	<i>Charina trivirgata roseofusca</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, oak woodlands and chamise chaparral. Often found in association with rock outcrops; 0-3000ft.	High potential to occur onsite. Appropriate habitat exists.

APPENDIX D

SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Coastal western whiptail	<i>Cnemidophorus tigris multiscutatus</i>	SOC/CSC	Mixed chaparral, riparian, oak woodlands and chamise chaparral. Prefers rocky firm soils but avoids dense grasslands and wet areas; 0-	High potential to occur onsite. Appropriate habitat exists.
Northern red diamond rattlesnake	<i>Crotalus ruber ruber</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, open grassy areas and agricultural areas, chamise chaparral, pinon juniper and desert scrub; 0-3000ft.	High potential to occur onsite. Appropriate habitat exists.
San Diego banded gecko	<i>Coleonux variegatus abbotti</i>	SOC/--	This species is uncommon in coastal scrub and chaparral mostly occurring in granite or rocky out crops in this habitat (Zeiner <i>et. al.</i> 1988).	High potential to occur onsite. Appropriate habitat exists.
San Diego horned lizard	<i>Phrynosoma coronatum blainvillei</i>	SOC/CSC	Occurs in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grass habitats; 0-3000ft.	High potential to occur onsite. Appropriate habitat exists.
San Diego ringneck snake	<i>Diadophis punctatus similis</i>	--/CSC	Coastal sage scrub, mixed chaparral, riparian, oak woodlands, chamise chaparral, mixed conifer, closed cone forest. Can be found on surface during winter after rainfalls or during spring; 0 to over 3000ft.	High potential to occur onsite. Appropriate habitat exists.
Silvery legless lizard	<i>Anniella pulchra pulchra</i>	SOC/CSC	Coastal sage scrub, grassland, riparian and coastal desert dunes. Found in sandy loam and areas of accumulated leaf litter beneath shrubs and trees; 0 to 3000ft.	High potential to occur onsite. Appropriate habitat exists.
South coast garter snake	<i>Thamnophis sirtalis</i>	SOC/CSC	Grasslands, woodland, scrub, chaparral, and forest. In or near ponds, marshes, swales, roadside ditches, streams, sloughs, damp meadows, farms, city lots. Tends to stay near water. 0-8000 ft.	High potential to occur. Appropriate habitat onsite.
MAMMALS				
American badger	<i>Taxidea taxus</i>	--/CSC	This species is most abundant in drier open stages of most shrub, forest, and herbaceous habitats; 0 to over 3000ft.	Low potential to occur onsite. No burrows found.
Big free-tailed bat	<i>Nyctinomops macrotis</i>	--/CSC	This species is found in a variety of plant associations including desert scrub, various woodlands and coniferous forests. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	High potential to occur onsite. Appropriate habitat exists. Detected in San Diego River watershed (SDCO 2004).

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE
DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Dulzura California pocket mouse	<i>Chaetodipus californicus femoralis</i>	SOC/CSC	Occupies coastal sage scrub, mixed chaparral, oak woodland, chamise chaparral, and mixed conifer habitats; 0 to over 3000ft.	High potential to occur onsite. Appropriate habitat exists.
Fringed Myotis	<i>Myotis thysanodes</i>	SOC/CSC	This species may be found in a variety of plant communities including desert scrub, oak woodlands, and pinyon-juniper forests. It is a colonial species that prefers caves, mines and abandoned buildings for roost sites. 0-9300 ft., optimal 4000-7000 ft.	Low potential to occur onsite. Elevation is on low range and was not detected in San Diego County bat survey (2004).
Greater western mastiff bat	<i>Eumops perotis californicus</i>	SOC/CSC	Open semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Crevices in cliff faces, high buildings, trees, and tunnels are required for roosting; 500-3000ft.	High potential to occur onsite. Appropriate habitat exists. Was detected in San Diego watershed (SDCO 2004).
Long-eared myotis	<i>Myotis evotis</i>	SOC/--	They are found in most brush, woodland, and forest habitats from sea level to 9000 feet, but more typically occurs in coniferous forests at elevations above 7000 feet. Roosts in buildings, crevices, bark, and snags.	Low potential to occur onsite. Elevation is low. Was not detected in San Diego County bat survey (2004).
Long-legged myotis	<i>Myotis volans</i>	SOC/--	Most common in woodland and forests above 4000 ft. Also in chaparral, coastal scrub, Great Basin shrub, and early successional stages of woodlands. Uncommon in desert and arid grassland. Roosts in rock crevices, buildings, bark, snags, mines, and caves. Feeds over water and open habitat. 0-11400 ft.	Low potential to occur onsite. Elevation is low. Was not detected in San Diego County bat survey (2004).
Los Angeles little pocket mouse	<i>Perognathus longimermbri brevinasus</i>	SOC/CSC	Los Angeles Pocket mouse is restricted to lower elevation grasslands and Coastal Sage associations in the Los Angeles Basin; 0-1000ft.	Low potential to occur onsite. No grassland habitat.
Mountain Lion	<i>Felis concolor</i>	County Sensitive	Species found in a variety of different habitats from desert to coast range forest; 0 to 10,000ft.	High potential to occur onsite. Appropriate habitat exists.

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE
DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Pallid bat	<i>Antrozous pallidus</i>	--/CSC	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, desert wash and desert scrub. Prefers snags (especially oak), rocky outcrops, cliffs and crevices with access to open habitats for foraging; 0-6000ft.	Moderate potential to occur onsite. Appropriate habitat exists, but was not detected in San Diego River watershed (SDCO 2004)
Pocketed free-tailed bat	<i>Nyctinomops femorosaccus</i>	--/CSC	This species is found in a variety of plant associations including desert scrub, coastal scrub and pine oak woodlands. Is a colonial roosting species that is typically found in crevices of rugged cliffs and high, rocky outcrops; 0 to 3000ft.	High potential to occur onsite. Appropriate habitat exists. Was detected in San Diego River watershed (SDCO 2004).
Ringtail	<i>Bassariscus astutus</i>	County Sensitive	Nocturnal; found in mixed and chamise chaparral. Nests in rock recesses, hollow trees, logs, snags, abandoned burrows, or woodrat nests; 500 to over 3000ft.	High potential to occur onsite. Appropriate habitat exists.
San Diego black-tailed jackrabbit	<i>Lepus californicus bennetti</i>	SOC/CSC	Coastal sage scrub, mixed chaparral, oak woodlands, chamise chaparral, mixed conifer, and closed cone forest and open areas. Common in irrigated pastures and row crops; 0 to over 3000ft.	Low potential to occur onsite. Species is easily observed but was not seen during any of the surveys.
San Diego desert woodrat	<i>Neotoma lepida intermedia</i>	SOC/CSC	Nocturnal in Coastal sage scrub, oak woodlands and chamise chaparral and rocky outcrops. Typically associated with cacti; 500-3000ft.	Moderate potential to occur onsite. Woodrat nests were found, but there was no cactus onsite.
Small-footed myotis	<i>Myotis ciliolabrum</i>	SOC/--	Occurs in arid uplands -- woody and brushy habitats near water. Roosts in caves, buildings, mines, crevices, bridges, and bark. 0 - 8000 ft.	High potential to occur onsite. Appropriate habitat exists; was detected in San Diego River watershed (SDCO 2004).
Southern grasshopper mouse	<i>Onychomys torridus ramona</i>	SOC/CSC	Nocturnal in coastal sage scrub, mixed chaparral, grassland, and chamise chaparral. Low to moderate shrub cover is preferred; 500-3000ft.	High potential to occur onsite. Appropriate habitat exists.
Southern mule deer	<i>Odocoileus hemionus</i>	County Sensitive	The mule deer is extremely adaptable occupying all but two or three of the major vegetation types in the western United States.	High potential to occur onsite. Appropriate habitat exists.
Spotted bat	<i>Eudema maculatum</i>	SOC/CSC	Primarily cave dwelling but also found in mixed chaparral and oak woodlands; 0-1000ft.	Low potential to occur onsite. No caves, and was not detected in San Diego County bat survey (2004).

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE
DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Stephen's kangaroo rat	<i>Dipodomys stephensi</i>	FE/ST	Occurs primarily in annual and perennial grassland habitats, but may occur in sparse coastal sage scrub or disturbed areas; sparse perennial vegetation with sandy or gravelly soil.	Low potential to occur. No grassland onsite.
Townsend's western big-eared bat	<i>Corynorhinus townsendii</i>	SOC/CSC	Found in all but subalpine and alpine habitats. Requires caves, mines, tunnels, buildings, or other human-made structures for night, day, hibernation or maternity roosts; 500-10,000ft.	High potential to occur onsite. Appropriate habitat exists. Freeway bridge nearby may provide roost sites. Was detected in San Diego River watershed (SDCO 2004).
Western red bat	<i>Lasiurus blossevillii</i>	County Sensitive	Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests; prefers riparian. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands; 0 to 3000ft.	High potential to occur. Appropriate habitat exists. Was detected in San Diego River watershed (SDCO 2004).
Yuma myotis	<i>Myotis yumanensis</i>	SOC/CSC	Mixed chaparral, riparian, oak woodland and pinon juniper. Optimal habitats are open forests and woodlands with sources of water over which to feed; roosts in buildings, mines, caves, bridges, crevices, and abandoned swallow nests. Sea level to 11,000 feet, but uncommon above 8000 feet.	High potential to occur. Appropriate habitat exists. Was detected in San Diego River watershed (SDCO 2004).
BIRDS				
Bell's sage sparrow	<i>Amphispiza belli belli</i>	SOC/CSC	Coastal sage scrub, mixed and chamise chaparral. Nests well hidden in sagebrush or other scrub; 0-3000ft.	Low potential to occur onsite. Habitat burned and will take time to recover.
Black-shouldered kite	<i>Elanus caeruleus</i>	--/CSC	Grasslands and riparian; 0-3000ft.	Moderate potential to occur onsite. Riparian habitat exists, but no grasslands.
California gnatcatcher	<i>Poliophtila californica californica</i>	FT/CSC	Most numerous in low, dense coastal sage scrub habitat of coastal hills.	Low potential to occur onsite. Habitat burned and will take time to recover.
Golden eagle	<i>Aquila chrysaetos canadensis</i>	--/CSC Fully protected	Mountains, foothills, and adjacent grassland, open areas and canyons; 0-3000ft. (nesting/wintering)	High potential to occur onsite. Appropriate habitat exists and has been sighted in the area (SD Bird Atlas).

APPENDIX D
SENSITIVE ANIMAL SPECIES WITH THE POTENTIAL TO OCCUR WITHIN OR ADJACENT TO THE
DAOUD PROPERTY

Common Name	Scientific name	Federal/ State Status	Habitat	Potential On-Site
Loggerhead shrike	<i>Lanius ludovicianus</i>	SOC/CSC	Roadside vegetation, thickets, savanna, coastal sage scrub, grasslands, riparian, oak woodlands and desert scrub and wash or any open country with high perches as lookouts; 0-3000ft.	High potential to occur onsite. Appropriate habitat exists.
Rufous-crowned sparrow	<i>Aimophila ruficeps canescens</i>	SOC/CSC	Favors steep and rocky coastal sage scrub.	Low potential to occur onsite. Habitat burned, but will take time to recover.
Sharp-shinned hawk (nesting)	<i>Accipiter striatus</i>	--/CSC	Open woodlands, residential, larger trees for nesting. Uncommon migrant and winter visitor, casual summer visitor; nesting has not been documented in San Diego County (Unitt 1984).	Low potential to nest onsite. Nesting has not been documented in San Diego County.
Tricolored blackbird	<i>Agelaius tricolor</i>	SOC/CSC	Nests in dense colonies in freshwater marshes.	Low potential to occur onsite, no appropriate habitat.
Western bluebird	<i>Sialia mexicana</i>	County Sensitive	Occupy open habitats with scattered trees and the edges of open coniferous and deciduous forests.	Moderate potential to occur onsite. Habitat is open due to burn.
Yellow-breasted chat	<i>Icteria virens</i>	--/CSC	Found in dense thickets and brushy areas in riparian habitats; 0-3000ft	Low potential to occur onsite. Habitat burned and will take time to recover.

* = Appendix E –

Sensitivity Codes

APPENDIX E
SENSITIVITY CODES

APPENDIX E

SENSITIVITY CODES

FEDERAL SPECIES DESIGNATIONS (USFWS 2001)

Category

FE	Federal Endangered species
FT	Federal Threatened species
FPE	Taxa proposed to be listed as Endangered.
FPT	Taxa proposed to be listed as Threatened.
SOC	Species of Concern (former Candidate Species)

STATE SPECIES DESIGNATIONS (CDFG 2000)

Category

SE	State listed as Endangered.
ST	State listed as Threatened.
SR	State-listed Rare
SCE	State candidate for listing as Endangered.
SCT	State candidate for listing as Threatened.
CSC	CDFG "Species of Special Concern".

CALIFORNIA NATIVE PLANT SOCIETY DESIGNATIONS (CNPS 2003)

The CNPS Lists

- List 1 Plants of highest priority.
 - 1A Plants presumed extinct in California.
 - 1B Plants rare, threatened or endangered in California and elsewhere.
- List 2 Plants rare, threatened or endangered in California, but more common elsewhere.
- List 3 Plants about which we need more information. (A Review List)
- List 4 Plants of limited distribution (A Watch List).

The R-E-D Code

R (Rarity)

- 1 Rare, but found in sufficient numbers and distributed widely enough that the potential for extinction is low at this time.
- 2 Distributed in a limited number of occurrences, occasionally more if each occurrence is small.
- 3 Distributed in one to several highly restricted occurrences, or present in such small numbers that it is seldom reported.

E (Endangerment)

- 1 Not endangered.
- 2 Endangered in a portion of its range.
- 3 Endangered throughout its range.

D (Distribution)

- 1 More or less widespread outside California.
- 2 Rare outside California.
- 3 Endemic to California.

APPENDIX F

CNNDB FIELD SURVEY FORMS

California Native Species Field Survey Form

Mail to

Natural Diversity Database
California Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814

For Office Use Only

Source Code

Quad Code

Elm Code

Occ. No.

EO Index No.

Map Index No.

Date of Field Work: 04 - 23 - 2004
month (mm) date (dd) year (yyyy)

Scientific Name: Cnemidophorus hyperythrusCommon Name: Orange-throated whiptail

Species Found? ☒ yes ☐ no If not, why? 07-27-04
Total No. Individuals _____ Subsequent Visit? ☒ yes ☐ no
Is this an existing NDDDB occurrence? ☐ no ☐ unk.
Yes, Occ. # _____
Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Jane Higgins
Address: RC Biological Consulting
9621 Campo Rd., Suite C
Spring Valley, CA 91977
Email Address: Jane@rcbio.com
Phone: (619) 463-1072

Plant Information

Phenology: _____
% vegetative _____ % flowering _____ % fruiting _____

Animal Information

Age Structure: 4
adults _____ # juveniles _____ # unknown _____
☐ breeding ☐ wintering ☐ burrow site ☐ rookery ☐ nesting ☐ other

Location (please also attach or draw map on back)

County: San Diego Landowner / Mgr.: David Deoud
Quad Name: Alpine Elevation: 1100 - 1400 ft.
T 15S R 2E E E 1/2 of NE 1/4 of Section 19 T _____ R _____ 1/4 of _____ 1/4 of Section _____
UTM: Zone: _____ (10, 11) Datum: _____ (NAD83, NAD27, WG584, other)
Source: _____ (GPS, map & type, etc.) Point Accuracy: _____ Meters
UTM Coordinates _____

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Coastal Sage Scrub (Inland) - Southern aspect Soils: Cienega-Fallbrook
rocky-sandy loams, eroded, 30-65% slopes

Other rare species? rush chaparral star (Machaeranthera juncea)Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ PoorCurrent / surrounding land use: undeveloped, traversed by dirt roadsVisible disturbances / possible threats: Burned in Cedar fire, October 2003Comments: Site is regenerating after fire.

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference):
☐ Compared with specimen housed at:
☒ Compared with photo / drawing in: Stebbins, R.C. 2003. A Field Guide
to Western Reptiles and Amphibians
☐ By another person (name):
☐ Other:

Photographs: (check one or more)

Slide Print

Plant / animal ☐ ☐
Habitat ☐ ☐
Diagnostic feature ☐ ☐

May we obtain duplicates at our expense? ☐ yes ☐ no

California Native Species Field Survey Form

Mail to

Natural Diversity Database
California Department of Fish and Game
1807 13th Street, Suite 202
Sacramento, CA 95814

For Office Use Only

Source Code

Quad Code

Elm Code

Occ. No.

EO Index No.

Map Index No.

Date of Field Work: 07 - 27 - 2004
month (mm) date (dd) year (yyyy)

Scientific Name: *Machaeranthera juncea*Common Name: *Rush chaparral-star*

Species Found? ☒ yes ☐ no If not, why? _____
Total No. Individuals 101 Subsequent Visit? ☐ yes ☒ no
Is this an existing NDDB occurrence? ☐ no ☐ unk.
Yes, Occ. # _____
Collection? If yes: 10
Number Museum / Herbarium

Reporter: *Jane Higginson*
Address: *RC Biological Consulting*
9621 Campo Rd, Suite C
Spring Valley, CA 91977
Email Address: *Jane @ rcbio.com*
Phone: *(619) 463-1072*

Plant Information

Phenology: 100
% vegetative % flowering % fruiting

Animal Information

Age Structure: ☐ # adults ☐ # juveniles ☐ # unknown
breeding wintering burrow site rookery nesting other

Location (please also attach or draw map on back)

County: *San Diego* Landowner / Mgr.: *David David*
Quad Name: *Alpaz* Elevation: *1100 - 1400 ft.*
T *155* R *2E* E *1/2* of *NE* 1/4 of Section *19* T _____ R _____ 1/4 of _____ 1/4 of Section _____
UTM: Zone: _____ (10, 11) Datum: _____ (NAD83, NAD 27, WG584, other)
Source: _____ (GPS, map & type, etc.) Point Accuracy: _____ Meters
UTM Coordinates _____

Habitat Description (plant communities, dominants, associates, substrates/soils, aspects/slope)

Coastal Sage Scrub (Inland) and Disturbed. Southern aspect. 30-65% slopes
soils - Cienega-Fallbrook rocky-sandy loams, eroded

Other rare species? *orange-throated whiptail (Cnemidophorus hyperythrus)*

Site Information Overall site quality: ☐ Excellent ☒ Good ☐ Fair ☐ Poor

Current / surrounding land use: *undeveloped, traversed by dirt roads*

Visible disturbances / possible threats: *Burned in Cedar fire, Oct. 2003*

Comments: *Site is regenerating after fire.*

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference)
☐ Compared with specimen housed at:
☒ Compared with photo / drawing in: *Lightner, James. San Diego County Native Plants. 2004*
☒ By another person (name): *Andrew Pignolo*
☐ Other

Photographs: (check one or more)

Slide Print

Plant / animal ☐ ☐
Habitat ☐ ☐
Diagnostic feature ☐ ☐

May we obtain duplicates at our expense? ☐ yes ☐ no